THE

LOUISVILLE MEDICAL NEWS.

"NEC TENUI PENNÂ."

SATURDAY, AUGUST 1, 1885.

Original.

EXSECTION OF THE DISTAL ENDS OF BOTH TIBIÆ AND ONE FIBULA FOR THE RELIEF OF NECROSIS AND CARIES.*

BY J. G. CARPENTER, M. D.

W. B., aged twelve years, has a good family history on his mother's side, but some of his father's aunts and uncles have died of phthisis. W. B.'s health had always been good until March, 1884, when in company with some boys he went a-swimming in the creek, being exposed for several hours to the cold water and weather.

An attack of acute articular rheumatism followed this exposure. As this was subsiding, acute erysipelatous inflammation of the integuments over the tibial and fibular regions resulted, and a series of abscesses, situated over both tibiæ between the ankles and the spines, followed. These were evacuated by free incisions as they formed, which treatment was supplemented by hot fomentations or poultices, drainage and antiseptic dressings, alteratives, tonics, reconstructives, and nutritious food.

The posture of patient was semi-recumbent, with the feet flexed on the legs; the legs, thighs, and trunk being in a state of semi-flexion. The case was under the management of Dr. G. W. Bronough until the 30th of July, when the writer was called in consultation. Necrosis of the bones of the legs was previously the diagnosis of Dr. Bronough, and in consultation we agreed that caries of the lower articular ends of the bones of the legs existed with necrosis of the shafts of the tibiæ, and that excision was the proper remedy in the case.

On August 1st, 1884, at 10 A. M, the patient was chloroformed, a one hundred and fiftieth of a grain of atropia with one eighth of a grain of morphia sulphate being given hypodermically during the administration of the anesthetic; five grains of quinine were also given.

Anesthesia being complete an exploratory incision was made over the lower third of the crest of the left tibia. The articular lower end was found to be carious, and the shaft to be necrosed. The periosteum was found separated from the bone by previous suppuration; in many places on the inner and posterior surfaces of the shaft burrows of pus existed, the shaft presenting a worm-eaten appearance. It was separated from its lower epiphysis. The exploratory incision was extended to the tubercle of the tibia and the bone found to be diseased up to this point. Excision of the shaft below the tubercle was done by means of the chain-saw. The wound was thoroughly cleansed, drained with soft rubber drainage-tubes, disinfected with listerine, one to two, and dressed antiseptically. Coaptation of the lips of the wound was secured by means of silver sutures, placed one inch apart. Between these were put strips of rubber adhesive plaster half inch wide and long enough to encircle the leg one and one third times. The limb was then wrapped in absorbent cotton soaked in listerine and water, one part to eight.

The operation having been completed on the left leg, an exploratory incision was made in the right leg over the crest of the tibia, from the ankle to the tubercle. Here the condition was similar to that presented by its companion bone, but in addition we found caries of the lower articular end of fibula. The integument over the bones was of a blue color, and much attenuated as in the left leg. There were also many pus sinuses and fistulæ about the ends of the diseased bones, some of which involved the ankle-joint.

The right tibia, from the tubercle to the

*Read at the June Meeting of the Kentucky State Medical Society.

ankle-joint, was removed, and with it four inches of the lower end of the fibula. The wound was thoroughly cleansed, disinfected, drained, closed, and antiseptically dressed as was done with the other limb.

The patient rallied well from the anesthesia and the by no means inconsiderable shock following the operation of double exsection, though considerable nausea and vomiting followed the chloroform narcosis, and lasted for twenty-four hours.

August 3d, the surgical dressings being soiled were removed, and the wounds were washed and dressed antiseptically, listerine being used on the left, and bichloride of mercury on the right leg. The wounds were dressed every third day until the 12th, and on every fourth day until September 3d, on every sixth day until October 4th, and then every eighth day until December 6th.

On October 23d, the left leg was incased in a plaster-of-paris dressing, and on November 29th the right leg was treated after the same manner. The limbs were kept incased in plaster-of-paris till June 13, 1885, the knee and ankle-joints being thus made immovable. After the wounds had healed a little sinus formed in each leg near the tubercles of the tibiæ, and a small spiculum of bone was removed from each; under injections of balsam of Peru, the sinuses soon healed. Although there were bridges of union by first intention in both wounds, the greater part of each healed by granulation. Suppuration was slight, considering the size and length of the wounds and the amount of bone removed.

The silver sutures were removed at periods ranging from the sixth to the fourteenth day. The drainage-tubes in the upper portion of the legs were removed about the twenty-first day; those near the ankle in about six weeks.

The indications of the case seemed clearly to preponderate in favor of excision against amputation. By excision useful members will doubtless result, which for strength, solidity and length—the three great essentials to be realized after excision of long bones of lower extremities—excels any artificial limb that could have been applied had amputation been performed.

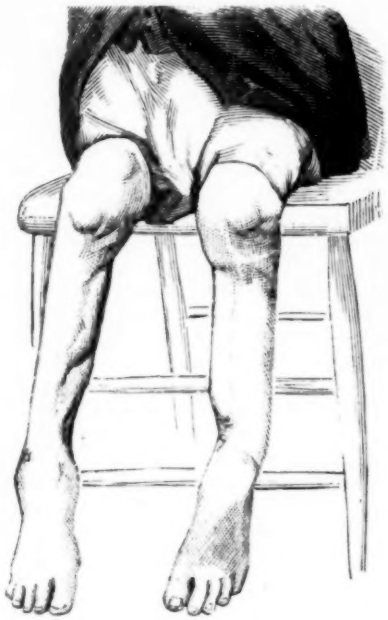
A question pertinent to the final convalescence of the case is, will reproduction of ossific matter take place in amount sufficient to make new bones, or will arrest of development of the bones and limbs result?

Regeneration of new bone is effected principally by the periosteum and the soft tissues and slightly by the endosteum. The case is all the more promising if the articular ends of the old bones be intact. All long bones have three centers of ossification, a nucleus for the shaft and one for each epiphysis. In the latter for the lower end of the tibia, ossification is perfect at twenty years; in that for the proximal end at twenty-five years, and in the lower epiphysis of the fibula at twenty years. In the ossific nucleus of the upper end of the tibia and interlamellar cartilage the growth or the reproduction of new bone is much more rapid from above downward than from below upward; and since the epiphysis of the tibia and interlamellar cartilage were destroyed by caries, and the lower end of tibia must depend principally, if not entirely, on the periosteum and soft tissues for the reproduction of bone, this must be slow. The epiphyses do not take an equal share in the development of a long bone, but one is more active than the other. The upper epiphysis of the humerus and tibia, and the lower, in the radius and femur, contribute most to the development of the respective bones. It is well known to physiologists that the longitudinal growth of a bone is carried on mostly through the interlamellar cartilage between the epiphysis and shaft of the bone, while epiphyses are not joined to the shaft by osseous union until the bone has reached its full length. (Erichsen.)

"In excisions practiced on a growing child in whom the osseous development is not complete, if the whole of the epiphysis is removed the subsequent growth of the bone and the limb will be arrested in proportion to the extent of the influence of the removed epiphysis in the development of the bone." The proof is conclusive that reproduction of bone will take place, but that in the distal ends of the tibiæ it will be longer in doing so than in the shaft, and longer in the right leg than the left, since the lower fourth of the fibula was here also removed for caries and necrosis. The right leg will necessarily be shorter than the left, since three fourths of the tibia and one fourth of fibula were removed.

In the upper extremities it is essential to get fibrous ankylosis of the joint, and semiflexion of the fore-arm upon the arm, even if great shortening results; in the lower extremities, osseous ankylosis, length, stability, and strength being the *desiderata*, after an excision or resection. When compact tissue is removed from the shaft of a bone for necrosis, callus is thrown out around the bone;

if the cancellous tissue is involved the cavity left is filled with fibrous tissue, which finally ossifies. In speaking of caries and necrosis, Mr. Erichsen states that occasionally a very considerable extent of the shaft, indeed, even the whole of the tibia may be removed as a loosened sequestrum from the interior of the periosteum, more or less consolidated and strengthened by the deposit of new bone. The result from excision is usually very satisfactory, the limb that is left being strong, useful, and sound.



At a clinic in Bellevue Hospital, in the fall of 1885, Prof. James R. Wood presented to the students a number of cases of excisions of the tibia and fibula in persons on whom he had operated successfully, removing one or both bones of the leg, and, with the exception of the cicatrix on the front surface of the leg for an index, it was difficult for the students to say which had been the disabled limb. Mr. Erichsen relates several cases (pages 253–4) in whom the knee-joint had been removed by excision. In one, that of a sailor, who was able seven years after the operation to perform all the duties of his calling; another, that of a boy, who could run and walk rapidly, or hop two or three yards without putting the sound limb to the ground.

Listerine proved in this case to be as good an antiseptic in every respect as bichloride of mercury solution (strength, 1–2000). Reproduction of bone has begun, and can be felt from the ankles to the tubercles of the tibiæ. It is difficult to state how long it will be before the legs will be useful members. From present indications, however, it seems safe to say that in two or three years from the date of the operation reformation and consolidation of bone will be complete

The figure here presented was made ten months after the operation. The finale of this case will be reported in due time to the readers of the Louisville Medical News.

STANFORD, KY.

Miscellany.

THE INTERNATIONAL MEDICAL CONGRESS —MORE RESIGNATIONS FROM THE RECONSTRUCTED LISTS OF OFFICERS AND COMMITTEES.—The following was adopted, on July 17th, by the members of the profession in Cincinnati and vicinity who were appointed to office by the Chicago Committee:

WHEREAS, The recent action of the American Medical Association with reference to the organization of the proposed International Medical Congress was, we believe, detrimental to the best interests of the Congress, therefore,

Resolved, That we, the undersigned, nominated members of the Congress, hereby decline to serve.

P. S. CONNOR, J. C. REEVE,
F. FORCHEIMER, W. W. SEELY,
S. NICKLES, J. T. WHITTAKER,
THAD. A. REAMY, E. WILLIAMS,

AND STILL THEY COME, OR, RATHER, GO. Dr. W. A. Hardaway, of St. Louis, has declined the Presidency, and Dr. J. Nevens Hyde, of Chicago, the Vice-Presidency, of the Section of Dermatology and Syphilis in the new organization of the Congress.

Drs. George M. Sternberg and R. H. Shufeldt, U. S. A., E. Van de Warker, of Syracuse, N. Y., William Lee, of Washington, J. M. Keating and George E. De Schweinitz, of Philadelphia, have also declared their intention to decline office.

Drs. Senn and Englemann have resigned from the General Committee.

A BLACK EYE FROM THE AMERICAN OPHTHALMOLOGICAL SOCIETY.—This far-seeing body, at its recent meeting held in New London, Connecticut, put the optic apparatus of the Reconstruction Committee in hypopion by taking action as follows:

Resolved, That it is the sense of the American Ophthalmological Society that the action of the

American Medical Association at its late meeting in New Orleans, and of the enlarged Committee appointed at that time to make arrangements for the International Medical Congress, in overturning much of the carefully planned work of the original Committee appointed at Washington for the same purpose, was unwise and not to be defended, unless, possibly, on technical grounds; and this Society hopes that none of its members will indorse the action of the enlarged Committee by accepting official positions at its hands.

How it Looks when Viewed in Perspective over Several Thousand Miles of Brine. — The London Medical Times and Gazette comments on the situation as follows:

There is a very unfortunate discussion going on at present in professional circles in America, which, it is quite possible, may turn out disastrously for the International Medical Congress which it has been decided to hold in Washington in 1887. It will be remembered that a small committee of the American Medical Association was nominated by the executive of the Copenhagen Congress, with full power to add to their number, and to act on behalf of their professional brethren. Carrying out their mission, they chose as colleagues twenty-eight leading American practitioners, especially selected on account of their standing in the profession, and drew up the programme which has already been published. Subsequently, when the Committee reported to the meeting of the American Medical Association at New Orleans, exception was taken to their proceedings on the plea that they had exceeded their powers, and had no commission to act on behalf of the Association. The jealousies that had been roused among those who had been passed over in the co-optative selection were worked upon by two or three pushing wire-pullers, and, in the end, resolutions were passed, revising the work of the Committee, and substituting a committee of thirty-eight men selected from the different States and Territories for those added to their number by the orignal Committee At a subsequent meeting, the results of which we are daily expecting to hear, the subject was again to come under consideration, and we learn that it was the intention of all the leading practictioners in the States to withdraw from the Congress, if the decisions of the original Committee were not treated with more respect. We sincerely hope that the profession in America will strenuously support their recognized leaders; otherwise they will make an exhibition of themselves to the world, and, besides imperiling the future success of those international gatherings which have hitherto been conducted with so much harmony, will distinctly lower the respect in which the profession is held throughout the world.

Uterine Fibromata and Castration.—Dr. W. Wiedow, a docent in the University of Freiburg, contributes some statistics on the above subject to the *Archiv f. Gynæk.* The cases embraced in his paper number one hundred and forty-nine; fifteen died in consequence of the operation — certainly rather a high percentage — ten per cent. Some months after the operation seventy-six could be considered as cured, while in fifty-two others, after the lapse of a year, a decided improvement had taken place, either in diminution in the size of the tumor, or lessened hemorrhage. He considers the fibro-cystic and pediculated subserous tumors of the uterus unsuitable for the operation. Myomotomy here affords the only effective treatment. Removal of the fallopian tubes *alone* is not a proceeding to be recommended.—*Medical Press.*

Use of the Membranes in Labor.—In an article in the Chicago Medical Journal and Examiner, Dr. Byford makes a strong plea for non-interference with the membranes during labor, or until they protrude through the vulva. The presence of the bag of waters he maintains favors gradual dilatation, serves to protect the parts from laceration, and prevents irregular contraction of the uterus. He regards it as strange that obstetric science should teach the deliberate breaking up of the simple process of nature and substitute an unnatural and artificial one.

Antipyrine in Sun-stroke.—Dr. Benj. F. Westbrook reports, in the New York Medical Journal (July 25th), two cases of sun-stroke treated by hypodermic injections of antipyrine. They were both severe cases, the temperature ranging from 107.50° to 110°, being accompanied by coma and convulsions. Half-dram doses of a fifty-per-cent solution of antipyrine hypodermically together with cold applications and phlebotomy were given and with success. One of the cases was very severe.

Heat as an Oxytocic.—Dr. W. B. Arbery, in the Medical Record, says that he has used heat locally over the uterus to facilitate labor, and with much satisfaction. Even after large doses of ergot and quinine had been given with little benefit, a large hot mush-poultice placed over the fundus of the womb, and repeated when it becomes cool, has acted promptly. He claims this as a new idea, and is anxious that it be given a trial. The poultices should be kept as hot as can be borne.

Dr. John Staige Doris, Professor of Anatomy and Materia Medica at the University of Virginia, died July 18th, of paralysis.

THE PRICE OF COCAINE. — Dr. E. R. Squibb, in the Ephemeris for July, states that, owing to the large shipments made recently of the coca leaves, the price has fallen, and that the hydro-chlorate of cocaine will now be furnished at ten cents a grain. The leaves cost fifty cents a pound. Thirty-three grains of the alkaloid are obtainable from a pound of the leaves. The cost of this extraction is one dollar and twenty cents, thus making the actual cost of the salts about five and a fraction cents a grain. This price will certainly contribute to its more extensive use.

CUPROUS HYDROGEN ARSENITE. — A farmer in the neighborhood of Louisville was last week accidentally poisoned by paris green. While sprinkling the drug on his potato vines (as is the wont of all farmers in this section) for the purpose of destroying the Colorado beetle, he took from his pocket a piece of tobacco which proved a ready carrier of the deadly poison from his fingers to his mouth. The drug took rapid effect, and the patient was past recovery before medical aid could be had.

THE editors of the Journal of Cutaneous and Venereal Diseases call attention to the apparent deterioration in the strength and activity of chrysarobin (chrysophanic acid). It is maintained that the samples of this drug now on the market are inferior in quality to that formerly furnished, requiring two or three times as much to produce the effect desired.

PROFESSOR TYNDALL'S GIFT TO AMERICAN COLLEGES.—The British Medical Journal states that the proceeds of Prof. Tyndall's lectures in the United States in 1872, which with the accumulated interest now amount to $32,400. are to be divided equally among Columbia College, Harvard University, and the University of Pennsylvania.

SURGEON JOSEPH H. BILL, of the army, died at Yonkers on the 21st ult. The deceased was a native of Pennsylvania. He was a member of the Army Medical Service for twenty-five years, and won rank and fame as a brave and efficient officer during our late war. His death is said to have been due to Bright's disease.

THE PIROGOFF MEDICAL SOCIETY.—The medical profession of Moscow and St. Petersburg have founded a medical society in memory of Russia's greatest surgeon, Pirogoff. Its officers have been duly elected, and the first general meeting will be held in St. Petersburg from the 27th to the 30th of next December.

THE first issue of DANIEL'S MEDICAL JOURNAL is before the profession. It is bound in flaming red covers, which are in keeping with the red-hot matter to be found within. The editor, who is also its publisher, lives in Austin, Texas. The journal is a monthly of 57 pages. Its subscription price is $2.00 per year.

THE CARTWRIGHT PRIZE.—The College of Physicians and Surgeons of New York has this year awarded the Cartwright prize of five hundred dollars to Dr. William Russell, of Edinburgh, for an original thesis on "The Heart in Debility." The prize is open to universal competition.

AT the recent meeting of the American Otological Society, the following officers were elected: President. Dr. J. S. Prout, Brooklyn; Vice-President, Dr. Samuel Sexton, New York; Secretary and Treasurer, Dr. J. J. B. Vermyne, New Bedford, Mass.

DR. JOHN L. ATLEE, ex-President of the American Medical Association, and a surgeon of national reputation, died in Lancaster, Pa., July 18th, aged eighty-six years.

DR. N. SENN, of Milwaukee, Wis., has been appointed to the chair of Principles and Practice of Surgery in the College of Physicians and Surgeons, of Chicago.

AN International Congress to combat the abuse of alcoholic drinks, is announced to be held at Antwerp on the 11th and 12th of next September.

IN 1865 the United States claimed to have 24,042 insane persons; in 1870 the number was 37,432. and in 1880 it had reached 91,959.

ACCORDING to Dr. Gordon the circulation of the blood was familiar to the Chinese physicians two thousand years ago.

DR. E. W. LANE reports, in the Atlanta Medical and Surgical Journal, a case of double uterus, with a fetus in each cavity.

The Louisville Medical News.

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THE CHOLERA PROSPECT.

The early reappearance this year of cholera in Southern Europe, its evident foothold in Southern France, and wild ravages in Spain have made the inhabitants of Northern Europe and our own country justly solicitous as to its behavior, since there was good reason to believe that the disease would in this, its second season, take up the cosmopolitan line of march, as history shows it to have done upon the occasion of its former visits to Europe.

As the summer advances, however, a sense of security seems to be settling over the public mind as if all grounds for fear of the unwelcome visitor had been removed, and while this feeling is well from a psychic point of view, there is danger that it may become pernicious by favoring the neglect of sanitary precautions.

'Tis true that this epidemic has so far not fulfilled the prophecies of the epidemiologists; it holds to the southern latitudes with remarkable persistency, and manifests no tendency to spread northward. How far this territorial limitation of the disease may depend upon recent advance in our knowledge of its etiology, and, through this, certain valuable suggestions as to the problem of its management, can not at this time be said; but it is clear that in spite of medicine, sanitation, and Ferran, cholera is playing wild havoc in Spain, and making mischief in Southern France, from the ports of which lands it may at any time during the next three months be thrust upon our shores, to be held at bay, we trust, by our presumably efficient coast quarantine service.

Some of the doings of the pestilence in Spain may be seen in the following, from the Lancet of July 11th:

> First, the disease showed itself in an epidemic form in the Province of Castellon, where nearly 3,000 cases and some 1,200 deaths have occurred; then the Province of Murcia was attacked, and so far nearly 4,000 cases and some 1,500 deaths have taken place there; next comes Valencia, where over 9,000 cases and some 4,400 deaths have occurred. Toward the end of June the Province of Alicante became widely infected, and hitherto there have occurred there about 1,400 cases and over 500 deaths; Toledo Province was attacked about the same time, and some 250 cases and over 100 deaths have occurred there; and in the Province of Saragossa the cases and deaths have numbered some 650 and 250 respectively. As regards the towns most affected, the city of Murcia has lost over 500 inhabitants, that of Valencia over 1,100, and in Aranjuez about 522 have died. Indeed, the deaths which have already occurred in Spain from cholera alone, since the beginning of June, considerably exceed 10,000 in number, and day by day the fatality and extent of the epidemic seem to be on the increase.

This frightful account of suffering and death, in a country no more remote than Spain, is certainly no soporific for those who have the public health in charge, and while the physician in no case should play the rôle of the alarmist, he should see to it that the possibility of a cholera visitation, during the summer and fall, is not lost sight of by his *clientele*, while it is made, under his wise counsel, to bear the salutary fruits of personal and public hygiene so far as the sphere of his influence may extend.

THE EASTERN MEDICAL JOURNAL, of Worcester, Mass., will hereafter be issued as a fortnightly.

Bibliography.

A Treatise on Practical Chemistry and Qualitative Inorganic Analysis; adapted for use in the Laboratories of Colleges and Schools. By FRANK CLOWES, D. Sc., London, Professor of Chemistry at University College, Nottingham, etc. With illustrations from the fourth English edition. Philadelphia: Lea Brothers & Co. 1885.

A few years ago we gave an extended notice of the third English edition, finding occasion for praise, but also for critical comment. We regret that the author sees fit to retain his peculiar double nomenclature for iron and mercury.

This is not a serious matter, but it gives to the book an appearance of singularity out of harmony with most text-books. In its substance, the work leaves little to be desired. We notice that a working description of the spectroscope as an instrument for chemical analysis has been introduced in the third section. There are many new illustrations, and in places there has been a change of the text for the better.

It can fairly be recommended as a clear and systematic guide for laboratory classes in general chemistry.

For medical students it is not sufficient, as it gives no space to the analysis of urine, blood, milk, and other animal fluids, and on the other hand devotes a great deal to the examination of many salts found in soils which are of no pharmaceutic or physiological importance whatever. J. W. H.

Second Report of the State Board of Health of the State of Tennessee; October, 1880, to December, 1884. Published by authority. J. Berrien Lindsley, M. D., Secretary and Executive Officer, Nashville, Tenn. 8vo, pp. xx and 600. Nashville: Albert B. Tavel, Printer to the State. 1885.

Cholera: Its Origin, History, Causation, Symptoms, Lesions, Prevention, and Treatment. By Alfred Stillé, M. D., LL. D., Professor Emeritus of the Theory and Practice of Medicine in the University of Pennsylvania. Cloth, 8vo, pp. 164. Price, $1.25. Philadelphia: Lea Bros. & Co. 1885. For sale by John P. Morton & Co.

A Text-book of Physiology. By M. Foster, M. A., M. D., F. R. S., Prelector in Physiology and Fellow of Trinity College, Cambridge. Third American from the fourth and revised English edition, with extensive additions and notes by Edward T. Reichert, M. D., Demonstrator of Experimental Physiology in the University of Pennsylvania. With two hundred and seventeen illustrations. 12mo, pp. 910. Cloth, $3.25, leather, $3.75. Philadelphia: Lea Bros. & Co. 1885. For sale by John P. Morton & Co.

A Text-book of Medical Physics. For the use of students and practitioners of medicine. By John C. Draper, M. D., LL. D., Professor of Chemistry and Physics in the Medical Department of the University of New York, and of Natural History and Physiology in the College of the City of New York; author of "A Text-book on Physiology and Hygiene," and "Practical Laboratory Course on Medical Chemistry." With three hundred and seventy-seven illustrations. Cloth, 8vo, pp. 733. Price, $4.00. Philadelphia: Lea Bros. & Co. For sale by John P. Morton & Co.

The London Medical Student and Other Comicalities. Selected and compiled by Hugo Erichsen, M. D. Published by Dr. H. Erichsen, 11 Farmer Street, Detroit, Mich. Price, $2.00.

We regret that in our recent editorial comment upon this work its author was not named as the publisher. We make the correction here with the hope that every reader of this journal, who finds his humor at low ebb under the desiccating influence of our present heated term, will lose no time in providing himself with Dr. Erichsen's great restorative.

Correspondence.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

In a recent paper entitled, Facts about Cholera, by Surgeon-Major I. F. Sargent, of the Indian Medical Department, he says that after having seen five epidemics of cholera he is led to regard the disease as in no way contagious in the ordinary sense of the term. In his experience no attendants or others about the patients have ever been attacked.

All who had treated cases in India were aware that when a sick person was brought in from a bazaar he was accompanied by his immediate relations, and often by a whole family, who remained in the closest communication with him. In the case of an outsider without friends, certain of the

hospital staff were always detailed to look after him, yet the writer had never known cholera to break out among the infirmary establishment at all. Sepoys suffering from the disease were always treated in hospital as long as there was room for them, in the category with the sick who required frequent attention, and he had never seen a patient in the institution, convalescent or otherwise, seized with the complaint.

At a meeting of the West London Medico-Chirurgical Society, Mr. Burrows gave a demonstration on the various digestive ferments, especially trypsin, and vegetable and animal diastase, and illustrated it by numerous experiments. He first added some extractum pancreatis (Fairchild), and in a few minutes he showed that no casein was precipitated on the addition of hydrochloric acid, it having been converted into peptone. Specimens of peptonized milk were handed round, which had no bitter taste whatever, and also some peptonized beef-tea, in which the proteid constituents had been converted into peptones by the action of the trypsin ferments of the extractum pancreatis. Mr. Burrows then showed, in the usual way, how rapidly the pancreatic diastase in the same extract converted starch into glucose and the intermediate products of digestion; and the same action was shown to take place with the Kepler extract of malt. Some delicious foods, as jellies, prepared with peptonized milk and fruit juices, were distributed for the members to taste. For general use, in peptonizing milk; the powders contained in glass tubes were recommended, each containing five grains of extractum pancreatis, and fifteen grains of soda-bicarbonate, the quantity required to digest a pint of milk in twenty minutes. Half a dram of the extractum pancreatis, and twenty grains of soda would digest a quarter of a pound of raw meat in three hours.

As president of the Royal and Ancient foundation of St. Bartholomew's Hospital, the Prince of Wales has opened the Kettlewell Convalescent Home at Swanley, which is to be devoted to the use of patients from the hospital. Fifteen or sixteen years have elapsed since the governors first consid ered the desirability of obtaining a home where patients' treated within the hospital might regain their health and strength before resuming their various occupations. No funds, however, were available for such a purpose, and the present treasurer, Sir Sydney H. Waterton, Bart., M. P., provided and fitted Lauderdale House, Highgate, with thirty-two beds for male patients, and placed the building and its contents at the disposal of the governors until they were enabled to establish a permanent one. In 1883 Mr. Charles T. Kettlewell, a governor of the hospital, being desirous of erecting a lasting memorial to his brother, Mr. Henry W. Kettlewell, generously contributed a sum of £10,000, for the erection of a convalescent home Another governor, who desires to be anonymous, presented £5,000 to purchase the site of the buildings and the grounds. On June 14, 1883, the foundation-stone was laid by the Rev. S. Kettlewell. As the work progressed it was found that an additional sum of £5,000 would be necessary to complete the structure externally and internally in accordance with the wish of the governors, and upon this being represented to Mr. Kettlewell he gave this sum, and also £1,000 toward the furnishing of the home. Mr. Ebenezer Homan, a governor and almoner of the hospital, has erected a chapel for the use of the inmates at a cost over £2,000. The governors have, at a cost of £10,000, constructed a laundry, fitted with machinery and appliances of the most approved kind. This adjunct will prove of great value both from an economical point of view and from the fact that it will assure perfect arrangements for the cleansing of the clothing and other articles used by the patients and female staff. The home has accommodation for seventy inmates—forty-five males and twenty-five females. The importance of this institution to the poor patients passing through the wards of St. Bartholomew's Hospital can not be overestimated, assisting, as it will, by quietude, rest, change of air, and good food, the treatment which has been carried out by the staff of the parent institution.

After the termination of the meeting of the Association in Cardiff, Messrs. Thomas Cook & Son, the well-known conductors of tourist expeditions, propose to conduct a party through Devonshire and Cornwall. The tour will occupy one, two, or three weeks' time, according to the inclination of those joining it. Already a number have done so.

At the last meeting of the Ophthalmological Society of the United Kingdom, Mr. Lang showed a mother and son suffering from the rare disease of congenital aniridia. In both subjects the iris on both sides was deficient. The patients had lateral nystag-

mus. The mother had a lamellar cataract in the right eye; the left eye had been cataractous, and had been operated upon unsuccessfully. The child had striæ in both eyes. The mother had had two other children; the second had aniridia, the boy shown being the third.

Dr. G. E. Paget, brother of Sir James, was, at the end of last term, presented by his old pupils and friends with a marble bust, which was placed in Addenbrook's Hospital, Cambridge, in consideration of his having been a physician to that institution for forty-three years. The subscribers to the memorial included the Prince of Wales and his eldest son, Prince Albert Victor. Speeches expressive of the deep esteem felt for Dr. Paget were made by Professor Humphrey on behalf of the medical staff of the hospital and by Dr. McAlister, on behalf of Dr. Paget's pupils.

The Sanitarium at Virginia Water, erected at the expense of the late Mr. Thomas Holloway, was formally opened by the Prince of Wales. The edifice cost nearly £300,000.

LONDON, July, 1885.

THE Mississippi Valley Medical Society (formerly Tri-State) will meet at Evansville, Ind., September 8, 9, and 10, 1885.

The officers are: President, Dr. F. W. Beard, Vincennes, Ind.; First Vice-President, Dr. A. B. Miller, Missouri; Second Vice-President, Dr. J. A. Sutcliffe, Indiana; Third Vice-President, Dr. E. H. Luckett, Kentucky; Secretary, Dr. G. W. Burton, Mitchell, Ind.; Assistant Secretary, Dr. H. J. B. Wright, Illinois.

Committee on Programme: Dr. A. M. Owen, Evansville, Ind., Chairman; Section on Surgery, Dr. W. A. Byrd, Illinois; Section on Practice and Pathology, Dr. Arch. Dixon, Kentucky; Section on Gynecology, Dr. George J. Engleman, jr., Missouri; Section on Obstetrics, Dr. George B. Walker, Indiana; Section on Therapeutics and Hygiene, Dr. J. F. Hibberd, Indiana; Section on Chemistry and Toxicology, Dr. J. G. Hyndman, Ohio; Section on Legal Medicine, Dr. Jacob Geiger, Missouri.

Gentlemen desiring to present papers, or wanting information concerning railroad rates, or programmes, will notify Dr. A. M. Owen, Evansville.

G. W. BURTON, *Secretary.*

MITCHELL, IND., July 28, 1885.

Societies.

MICHIGAN STATE BOARD OF HEALTH.

TYROTOXICON—CHEESE POISON: Abstract of a paper by Prof. V. C. Vaughan, M. D., Ph. D.

Dr. Vaughan presented a report of his investigations on poisonous cheese. It is well known that cases of severe illness follow the eating of some cheese. Such instances are of frequent occurrence in the North German countries and in the United States. In England they are less frequently observed; while in France, where much cheese is made and eaten, these cases are said to occur very rarely. A few years ago, the reputation of a large cheese factory in Northern Ohio was destroyed by the great number of cases of alarming illness arising from eating its cheese. Dairymen know this cheese as "sick" cheese.

Kinds of Cheese that are Poisonous. A German author says: "The numerous kinds of soft cheese, prepared in small families, or on small farms, are generally the cause of the symptoms; while it is quite exceptional to hear of symptoms arising from the use of cheese prepared in large quantities." Some two years ago, a family in Alpena, Michigan, was poisoned by eating of cottage cheese; but the cheese which poisoned so many in this State last year was made at one of the largest factories in the State, and by a thoroughly experienced cheese-maker. The old foul-smelling cheese, such as Limburger and Schweitzer, have never been known to be poisonous.

Effects of the Cheese. The symptoms produced by "sick" cheese, as reported by German and American physicians, agree quite closely and are as follows: Dryness of the mouth and throat with a sense of constriction, nausea, vomiting, diarrhea, headache, sometimes double vision, and marked nervous prostration. In rare instances the sufferer dies from collapse. As a rule recovery occurs in a few hours, or at most after a few days. The symptoms of cheese poisoning and those of sausage, canned meats, and fish poisoning are very similar, Though death results more frequently from the others mentioned than from cheese poisoning.

Appearance of the Cheese. The samples of the cheese examined had no peculiarities of appearance, odor, or taste, by which it could be distinguished from good cheese.

It is true that if two pieces of cheese—one poisonous and the other wholesome—were offered to a dog or cat the animal would select the good cheese. But this was probably due to an acuteness of the sense of smell possessed by the animal and not belonging to man. Indeed, if a person tasted a cheese knowing that it was poisonous, he might detect a sharpness of taste which would not ordinarily be noticed.

Have we any Ready Means of Recognizing Poisonous Cheese? There is no certain means aside from a chemical examination, by which a poisonous cheese can be distinguished from a wholesome one. The most reliable ready method is probably that proposed by Dr. Vaughan a year ago, and it is as follows: Press a small strip of blue litmus paper (which can be obtained at any drug store) against a freshly-cut surface of the cheese; if the paper is reddened instantly and intensely, the cheese may be regarded with suspicion. When treated in this way any green cheese will redden the litmus paper, but ordinarily the reddening will be produced slowly and will be slight. If the piece of cheese be dry, a small bit should be rubbed up with an equal volume of water, and the paper should then be dipped in the water. Dr. Vaughan does not regard the above test as free from error, but as the most reliable ready means now known. Every groceryman should apply this test to each fresh cheese which he cuts. The depth of the reddening of the paper may be compared with that produced by cheese which is known to be wholesome.

Effects on the Lower Animals. Dogs and cats, at least, are not affected by eating poisonous cheese. This is probably due to the fact that they do not get enough of the poison from the amount of cheese which they eat. The pure isolated poison in sufficient doses would undoubtedly produce upon the lower animals effects similar to those produced on man.

Nature of the Poison. Dr. Vaughan has succeeded in isolating the poison, to which he has given the name tyrotoxicon (from two Greek words which mean cheese and poison). It is a product of slight putrefaction in the cheese which probably occurs in the vat, as the curd has been known to poison a person. By this slight putrefaction, or excessive fermentation as it may be called, a large amount of butyric acid is formed, and this in the presence of the casein of the cheese is capable of developing a poison. Different samples of poisonous cheese contain different amounts of the poison. The same weight of cheese from one cake furnished three times as much poison as that from another cake. The poison was obtained in long needle-shaped crystals which are freely soluble in water, chloroform, alcohol, and ether. The smallest visible fragment of a crystal placed upon the end of the tongue causes a sharp stinging pain at the point of application, and in a few minutes, dryness and constriction of the throat. A slightly larger amount produced nausea, vomiting, and diarrhea. The poison is volatile at the temperature of boiling water, and for this reason even poisonous cheese may be eaten with impunity after being cooked. The substance has also a marked, pungent odor, and through the nose one can obtain sufficient of the volatile poison to produce dryness of the throat. This is true, however, only of the isolated poison. In the cheese the taste and the odor of the poison are both modified to such an extent that they would not be recognized, as has already been stated.

The first step in the study of cheese poisoning has now been taken, by finding out what the poison is. Efforts will be made to ascertain the means for preventing its formation.

Selections.

Toxic Normal Urine.—In a recent communication to the Société de Biologie, Prof. Bouchard has drawn attention to the poisonous effects that may be produced by normal urine when injected into the blood, even in small quantities. This toxicity has been a disputed question for a long time past, some affirming and others denying it; but the weight of evidence is on the affirmative side, although opinions differ as to the immediate poisonous agent—urea, uric acid, kreatin, and even the urinary potash-salts having in turn been held responsible.

Some years ago, MM. Gautier and Pouchet discovered alkaloids not only in putrid albumens, but also in bile and in normal muscle-juice; and M. Pouchet further discovered a new body in the urine, comporting itself as an alkaloid, and which in combination with hydrochloric acid, could form double salts with platinum, gold, and mercury. In 1881, MM. Brouardel and Boutmy made known a distinguishing reaction between the vegetable alkaloids and the pto-

maines or alkaloids of putrefaction. The ptomaines alone, in presence of potassic ferricyanide and ferric chloride, give the Prussian blue coloration. But the discoveries of Selmi, Gautier, Pouchet, Brouardel, and Boutmy, however useful to legal medicine, shed little or very imperfect light upon human pathology or therapeutics. These alkaloidal matters were merely considered the results either of putrefaction or of the ordinary processes of tissue-life. It was reserved however, for M. Brouardel to make an important advance in the knowledge of these bodies by demonstrating that, in the living state, alkaloids exist in the bodies of living beings, which have been generated in the alimentary canal, and probably elaborated by the vegetable organisms there present acting as the agents in intestinal putrefactions. The alkaloids of normal urine represent part of these intestinal alkaloids which have been absorbed and further elaborated by the kidneys.

The effects of intravenous injections of urine containing these alkaloids have been studied; and to meet the objection that might be made as to the resulting phenomena being of a mechanical nature, it may be stated that we can inject into an animal, without the least inconvenience, ninety cubic centimeters of water for every kilogram of its body weight. In the injections, of urine, the quantity used never amounted to the tenth of this amount; the effects were, therefore, not mechanical, but of a true toxic nature. Fifteen to twenty-five drops of normal urine, neutralized or not, injected into the veins of a frog, sufficed to kill it. When rabbits were experimented with, M. Brouardel noted contraction of the pupils, less frequent respiration, loss of muscular tone and of reflex movements, fall of temperature, and finally a state of torpor which quickly terminated in death when the dose was sufficiently great. The animal dies from arrest of respiration, the heart continuing to beat for some time after. The symptoms vary in intensity with the quantity of urine injected. When the animal survives the muscular resolution persists for some time, and the functions are re-established after an abundant diuresis. The condition here, it may be noted, closely resembles that of many uremics.

Having thus established the toxicity of urine, M. Bouchard next attempted to determine the toxic agent present. Although Gréhuat and Quinquaud have proved that urea possesses undoubted poisonous properties, yet M. Bouchard has shown that at least 6.66 grams of it for each kilogram of body-weight must be injected to cause an animal's death; and that thirty-four centigrams of uric acid for each kilogram of body-weight may likewise be injected with impunity. The kreatin and the other chief extractives were likewise found to be comparatively harmless, while the potash-salts, although undeniably toxic, produced phenomena quite different from those detailed above, besides being present in too small a proportion in the small quantity of urine injected to produce any marked effect. M. Bouchard also finds that, when urine has been filtered through animal charcoal, it has been deprived of some of its toxic properties without losing them entirely. He, therefore, concludes that there are numerous poisonous principles present, which do not reside in one, but in several of the urinary constituents. And that they are not of a volatile nature is proved by the fact that boiling the urine does not lessen its toxic properties, and further that these latter persist in urinary extracts. The alcoholic extract is toxic, but it does not cause contraction of the pupils, salivation, however, resulting freely. And it may be remarked here in passing that a somewhat similar alkaloidal substance appears to exist in muscle, liver-substance, and blood, which can be extracted by a similar proceeding. If the residue of the urine after it has been extracted with alcohol be dissolved in water and injected into the veins of an animal, much graver symptoms are induced than when the alcholic extract is injected—such, for example, as lowering of the temperature, contraction of the pupils, and coma. M. Bouchard, moreover, finds that the toxic qualities of urine are much intensified when the individual who has passed it is suffering even from a slight "cold" or catarrh, or from extreme fatigue. And recently it has been demonstrated by MM. Lépine and Guérin that the urinary alkaloids are also increased in different acute diseases, the degree of toxicity varying both qualitatively and quantitatively.

So much has been done, but so much is still to be done. It remains for chemists to solve the nature of these different urinary alkaloids, to make known their properties in the so-called infectious diseases, and to discover reagents which will readily detect their presence. To demonstrate in the urine poisonous substances that have circulated in the organism of a patient, and to

recognize, isolate, and study them—is not this the opening up of a way to rational medication, and may we not hope thereby to gain a knowledge of medicines that will act as real antidotes? In attempting the cure of certain septic diseases by the absorption of antiseptic remedies, the reproach has been incurred of killing the patient while attempting to destroy the microbe. But with the discovery of soluble toxic substances in the urine, substances that have circulated through the organism, may we not hope that better results will be obtained by leaving the impalpable microbes alone, and attacking and neutralizing the alkaloids generated by their agency?—*British Medical Journal.*

TREATMENT OF CERTAIN SKIN DISEASES OF CHILDHOOD. (*Arch. f. Kind.*, B. vi. H, 2.) The following observations are taken from the annual report of the St. Joseph's Hospital for Children in Vienna, for the year 1883: Moist eczema in children was found to yield readily to a soap-plaster containing from five to twenty per cent. of salicylic acid. Mild cases were cured in eight days, severer ones yielded in from two to three weeks, or, at any rate, the stage of scaling would be reached. In cases of general eczema, both papular and squamous, and in intertrigo, very good results were obtained by the use of Lassar's salicylic paste, formula for which is:

R. Acidi salicyl., ... 2 to 4 gr.;
Vaselini, ... 50 gr.;
Zinci oxidati, } ää 25 gr.
Amyli, ... }
M. and ft. pasta.

This paste should be rubbed upon the diseased surface and covered with cotton, a protective and non-irritative covering being thus formed. It was found to be far less irritating than the fatty applications. Scabies yielded the best results to the modified unguentum Wilkinsonii, which was rubbed twice into the skin, the patient being then left in bed for thirty-six hours, and the consequent eczema, if any, treated with salicylated soap-plaster, gelatine, or paste. In cases of prurigo, baths with plenty of soap succeeded in some cases; in others, the five-per-cent naphthal salve of Kaposi. In some cases of this affection a very weak solution of pilocarpin may be given, and continued until it is no longer tolerated. In *lupus vulgaris* good results followed the use of a ten-per-cent mixture of pyrogallic acid ointment; iodized glycerine, etc. In a case of papillary hypertrophic lupus, a sublimate solution of one tenth of a gram in one hundred grams of water was used five weeks without any consequent good result—*Archives of Pediatrics.*

THE IMPORTANCE OF SHAMPOOING AND GYMNASTIC EXERCISE IN THE TREATMENT OF EPILEPSY.—Dr. John Kent Spender, Physician to the Mineral Water Hospital, Bath, says, in the British Medical Journal:

Whatever may be the healing virtue of "rest" in a surgical sense, there are diseases in the treatment of which too much bodily rest and too much sleep may be medically injurious; that is to say, they are injurious in adding to the lethargic dullness which is the natural sequel of certain morbid processes; so that our duty as physicians lies in counteracting by outward means the depressing effects of internal and invisible forces. I do not wish to say that drugs have been too highly estimated in treating epilepsy; their effects are more striking than in the treatment of other diseases, and are one of the approximate certainties of medical art; but other remedial agencies have been valued too little. It may be proper to think of drugs first; but long ago Dr. Russell Reynolds recommended "wholesome mental exercise," and I wish now to add a plea on behalf of wholesome bodily exercise as well. Bodily exercise means bodily education, or the training of the muscles into stronger and more harmonious action; and, by soothing and regulating the motor nerves, all the disorderly phenomena of epilepsy may be brought into comparative subjection and quietness.

Among the useful hints which have been offered by Dr. Radcliffe on this subject, he has warned us that the "sleepy epileptic" must be roused early and made to leave his bed. Similarily, the stupid and idle epileptic must be summoned to his martial drill, and his senses kept "alive" by stir and movement. But even when the faculties are acute and femininely sensitive, the stultifying effects of the long-continued epileptic convulsion may be appropriately met by gymnastic exercises and by systematic shampooing of the whole body. In February, 1884, Dr. Radcliffe kindly intrusted to my care an epileptic lady of middle age, refined in manner, but almost emaciated in form, and the mother of two healthy and happy young children. Medicines of a special kind had been administered, including

cod-liver oil; but, during the last few months, the steady improvement has been materially quickened by the following plan of action. The body is sponged with hot water every day; the arms are moved up and down frequently (this expands the narrow chest), and clubs of moderate weight are raised with the hands. Walking in the open air has been encouraged on all possible days. Once a week, a professional shampooer comes and carries out a complete massage of the whole body. Two epileptic girls, children of farmers in a neighboring county, have rapidly improved under similar management.

What I have now written is probably quite familiar to experts in neurology; but Trousseau says nothing about it, and, in the best English monographs, the hygienic treatment of epilepsy receives scanty recognition. Assuming that a rational scheme of medication is adopted in any given case, I claim that regular shampooing and gymnastic exercises may greatly help our therapeutic work, and sometimes make all the difference between success and comparative failure.

A Case of Obturator Hernia.—Cases of obturator hernia are so uncommon and present such difficulties of diagnosis and treatment, that it may be well to place the following one on record, although strangulation had been in existence for so long that there was little hope of any treatment giving relief, and that adopted did not save the patient.

E. F., a woman aged forty-five, was admitted under my care into University College Hospital on May 29, 1884, at 8 P. M., with symptoms of intestinal obstruction. We were unable to obtain any good previous history of the case, and the notes do not mention the length of time from which she had been suffering from symptoms of complete obstruction; but they had been in existence for several days, I think about five, and she had for some time been bringing up fecal vomit. She was, on admission, in a state of great collapse, with small pulse, cold extremities, and a marked blue color of the skin. She complained principally of pain about the region of the umbilicus, or rather above it, and it was only on carefully examining all the hernia regions that it was found that there was distinct tenderness and slight fullness in the left Scarpa's triangle. On questioning her about this point, she allowed that for a long time past she had been subject to pain in this part, which extended down the front of the thigh and which was subject to variations, and was relieved by lying down; but it was evident that occasionally it had caused her considerable inconvenience. The diagnosis apparently lay between some twist or internal strangulation and an obturator hernia (though the possibility of the obstruction depending upon the presence of a tumor was not lost sight of,) and, considering that the former was not improbable, and that if it were the latter it could probably be safely dealt with by abdominal section, I proceeded to operate at 9 P. M. An incision about four inches long was made between the umbilicus and the pubes through the abdominal wall, and a piece of great omentum which lay beneath the incision and which was much matted together, was first drawn out of the wound. The index finger of the left hand was then at once passed down to the obturator foramen, and there was no difficulty in detecting the fact that a portion of bowel was tightly strangulated in the upper part of the obturator foramen. It was quite impossible without employing undue force to draw this back, so a blunt-pointed bistoury was carefully passed down along the finger, and by directing the edge inward the constricting ring was divided and the gut was reduced. The division of the stricture at such a depth from the surface and with the coils of intestine surrounding the finger was a matter of some difficulty, but when it was accomplished the gut was drawn up with ease. It proved to be a part of the small intestine, about two inches long; it was of a bluish color, but rapidly became red under observation. It was also seen that the previous traction had caused two slight rents in the peritoneal coat, which passed obliquely across the gut, the edges of which were accordingly drawn together with continuous sutures of very fine catgut. The lacerations bled readily. The portion of protruded omentum was then ligatured in two places and removed, the stump being returned, and the abdominal incision was approximated. The patient did not rally after the operation, though she took nourishment, including a good supply of brandy, well. The vomiting stopped, but her extremities remained cold and became more blue, and her skin was bathed in a cold perspiration. Towards the afternoon of the following day an excited delirium set in, and in the evening she died.

The autopsy revealed the fact that the portion of gut which had been constricted was about eighteen feet from the pylorus, and that its mucous membrane was dark and opaque from extravasated blood. There was slight peritonitis around the piece of gut which had been included in the hernia, the coils in this region being adherent to one another and to the pelvic wall by recent lymph. There was also a little reddish fluid in the peritoneal cavity. The hernial sac was of small size, and lay immediately beneath the pectineus muscle. Beyond considerable hypostatic congestion of the lungs, nothing else worthy of note was learned from the post-mortem examination.

I do not wish to bring this case forward in order to advocate the method of treating obturator hernia by abdominal section in preference to the operation in Scarpa's triangle, though it is probable that the latter is a more difficult procedure. The abdominal section is not an altogether simple matter, and it no doubt involves certain risks which are not encountered in the other operation. It was selected in this case because the symptoms, while obvious enough to direct attention especially to the obturator region, were not thought to be clear enough to negative the possibility of the mischief being found in the locality to which the greater part of the pain had been constantly referred; and it was argued that if the latter had been the case, an abdominal section following the necessarily tedious operation in the thigh would have been a very serious matter in the exhausted condition of the patient. An important lesson to be learned from the case is the extreme care which should be exercised in making traction on the intestine in a patient whose tissues, as they were in this case, are all in a very flabby and easily lacerable condition. *R. J. Goodlee, in Lancet.*

PARASITICIDES IN THE TREATMENT OF PULMONARY PHTHISIS.—In one of Dr. Hermann Weber's interesting Croonian Lectures on the hygienic and climatic treatment of chronic pulmonary phthisis, which have lately appeared in the Journal, he expresses a hope that some means may eventually be discovered of destroying the bacillus and its spores, either in the air we breathe, or in our tissues, without injury to ourselves. I have long thought that, if we are to contend successfully with phthisis, and set some limit to its diffusion, it is in the direction here indicated that our labors may most profitably be expended; for, as Dr. Weber further remarks, "when once the system is infected, we do not yet know of any parasite-killing remedies which, in effective doses, would not injure the host together with the parasite." The mischief, in fact, is then done; the fatal seed is sown, the bacilli are protected within the tissues and secretions of the lungs, and antiseptics are comparatively useless.

On this subject of disinfectants, in their varied bearings, much has been written of late years; some apparently coagulate albumen, others oxidize organic matter, while others, again, are fatal to the growth and increase of microzymes. Many of these substances have long been used in cases of sickness, and, in numerous instances, beneficial results have followed their adoption. But, though we are often told that antiseptic gases, sufficiently potent to destroy contagium, can not be tolerated by the living tissues, we still know comparatively little regarding the amount of rough usage the respiratory organs are capable of enduring, not only with impunity, but, in some cases, with apparent advantage. The information we possess on this subject is certainly scanty; still, certain facts have been recorded which tend to show that healthy lung tissues may be beneficially influenced by the action of disinfectants, and, at times, seemingly protected from the inroads of bacillus. Whether in such cases these organs become so altered in their chemical composition or in their vital properties as no longer to prove a congenial soil for the growth of the parasites, or the bacilli and their spores are destroyed, we have at present no means of deciding.

In confirmation of these remarks, I would refer to what really may be looked upon as extended experiments on antiseptic remedies, continually and efficiently carried out in the northwestern highlands and islands of Scotland. The great majority of the inhabitants of these districts unwittingly expose their lungs to an atmosphere largely charged with disinfecting fumes; thereby teaching us a useful lesson on the extraordinary tolerance of the respiratory organs to such sources of irritation. I will briefly describe the mode of life of these highlanders, in so far as the construction and heating of their dwellings is concerned; as in this manner the singularly abnormal atmospheric conditions to which they are exposed may be most conveniently studied.

The houses to which I refer are known

in the highlands as "bothies," and are the homes of the hardy crofters, to whose grievances public attention has of late been strongly directed. Many of them live under the same roof as their cattle, and in numerous instances the air of the dwelling reeks with the impure exhalations given off from the excretions of these joint inmates of the cabin. The primitive dwellings are warmed by a peat-fire kept constantly burning in the center of the floor. The luxury of a chimney is often altogether unknown. The smoke which rises from the combustion of this fuel, after thoroughly diffusing itself through every nook and corner of the building, makes its escape by a hole in a corner of the roof. Now it may be asked, how is the health of these persons influenced by inhaling constantly, both by day and by night, such an atmosphere as this; an atmosphere so pungent, that considerable irritation of the eyes and nostrils is frequently experienced by those exposed to the fumes?

Generally speaking, these highlanders are remarkably vigorous and long lived, and singularly exempt from the ravages of tubercular phthisis. Indeed, so rare is consumption in these hovels, that I was led to investigate the causes of this immunity, upward of twenty-five years ago, and published the results of my inquiries in an article on the Non-prevalence of Consumption in the Hebrides, and along the Northwestern Coast of Scotland, which appeared in the British and Foreign Medico-Chirurgical Review for October, 1860. At that time, I visited most of the districts to which my investigations extended; and from what I saw and heard, I came to the conclusion that the comparative immunity from phthisis which these persons enjoy is to be ascribed chiefly, at all events, to the inhalation of the peat-smoke and the antiseptic ingredients contained therein, the tar, the creasote, and the tannin, together with various volatile oils and resins, black, unctuous peat being rich in these substances. At that time, I need hardly say, nothing was known of the bacillus of Koch. It further appeared that any exemption from attacks of consumption which these highlanders enjoyed was only extended to them so long as they resided in their smoky huts. When they migrated to other parts of the country, or took up their abode in chimnied dwellings, they often suffered like their neighbors; nor, after the lungs once became infected, was a return to the homes of their fathers followed by favorable results. The fumes of the smoky cabin then exercised no curative influence.

The inference to be drawn from these remarks is sufficiently obvious. When the bacillus has once established itself in the lungs, the time for antiseptic remedies has gone by. On the other hand, where there is merely a predisposition to phthisis, whether hereditary or acquired, where also the climatic or social conditions for its diffusion are favorable, and where healthy persons are brought into close contact with those who are suffering from the disease, there it is reasonable to assume that disinfectants may prove of great value as prophylactics. Hence we may anticipate that, in the course of time, an efficient system of aerial fumigation will not alone assist the physician in warding off disease, but may enable the surgeon also to dispense with the cumbrous appliances associated with antiseptic dressings and the steam-diffusing urn.—*J. E. Morgan, in Brit. Med. Jour.*

THE MANAGEMENT OF PLACENTA PREVIA. Dr. McLean, in a paper read before the New York Academy of Medicine, March 26, 1885, arrived at the following conclusions regarding the management of placenta previa:

1. In any case of placenta previa avoid the application of chemical styptics.

2. Inasmuch as the dangers from hemorrhage were greater than all else, preparations to induce premature labor should be made.

3. In primiparous cases with rigid tissues, the vagina should be well distended with the colpeurynter or tampon until cervical dilatation had taken place.

4. It was safer to rely upon thorough continuous pressure by Barnes' dilator than upon pressure by the fetal parts.

5. Where the placenta was lateral or partial and there was no indication for hastening the labor, the method of Braxton Hicks might be practiced, consisting of turning by the bimanual method as soon as possible, pulling down a leg and with it and the breech of the child tamponing the ruptured placental vessels, and then letting the delivery be completed spontaneously, or aided by gentle traction.

6. When the head presented and the os was dilated or very dilatable, rupture the membranes.

7. Podalic version was to be preferred to the applications of forceps within the cervix, especially when the cervix was dry.

8. Complete vaginal tamponing might be applied and left in position in cases in which other means were not at hand.

9. The dangers of septic infection with the proper use of tampons and dilators was so slight that it need not be considered.

10. Wherever possible, delivery should be accomplished deliberately.

11. The greatest care must be exercised not to convey infectious material to the mother's system, which involved the application of the great principle of absolute cleanliness.—*Weekly Medical Review.*

AQUA CREASOTI.—The officinal aqua creasoti, or creasote water, is so important a preparation for one special use that it is well to notice it in order to emphasize that special use. It is a simple one-per-cent solution of wood creasote in water, and, like similar solutions of carbolic acid and of cresol, it is a most effective local anesthetic and topical dressing to burns and scalds. It is no better than the solutions of carbolic acid or coal-tar creasote for this purpose, but is quite as good, so that whichever is most accessible or most convenient may be used. This creasote water, as made by the above formula—or diluted with an equal volume of water, or with more water for delicate surfaces in women and children—and applied by means of a single thickness of thin muslin, or worn out cotton or linen, such as handkerchief stuff, and the application renewed from time to time, as the return of pain requires it—will relieve the pain of burns or scalds in five to ten minues, and will maintain the relief as long as the applications are properly renewed, or until the painful stage is over. It is also very effective as a local anesthetic for general use in all painful conditions which affect the surface only, such as the pain of erysipelas. The benumbing effect of these phenals upon the skin is very promptly reached, and can be carried to almost any degree that is desirable by simple management of the strength of the solutions and the mode of application. They are true anesthetics to the skin, while the much lauded cocaine is not. This statement has been published so often during the past twenty years, and the treatment has been so effective in so many hands, the old and comparatively useless and hot dressings, such as carron oil, white lead ground in oil, flour, liniments, etc., or the newer application of solution of bicarbonate of sodium.—*An Ephemeris of Materia Medica.*

CONCEPTION WITHOUT THE APPEARANCE OF THE MENSTRUAL FLOW.—Mrs. X., aged about thirty, married about six years, has been delivered at full time of three healthy children, and is now pregnant with the fourth. She menstruated quite regularly and naturally before her marriage, and for a few periods after. Since then she has had no menstrual discharge, nor any appreciable discharge of any kind from the vagina, except the lochia, which were natural in quantity and duration. She had no connection with her husband for some weeks after the cessation of the lochia. Her first child was born about a year after marriage, and she suckled it until it was fifteen months old, until she was again pregnant. The same occurred with each child, menstruation never having been re-established since her pregnancy. Having questioned and observed the woman very closely, I think it impossible to entertain any doubt of the correctness of her statement. A well-authenticated case, such as I consider this to be, shows pretty clearly that there can not be that intimate relation between ovulation and menstruation that some authors seem to think. Ovulation can undoubtedly occur without menstruation (as in this case), and we know the menstrual flow does occur without ovulation, as in cases where menstruation has occurred after amputation of both ovaries. *Arthur Oakes, M. D., in British Med. Jour.*

ARMY MEDICAL INTELLIGENCE.

OFFICIAL LIST of Changes in the Stations and Duties of Officers serving in the Medical Department of the United States Army, from July 19, 1885, to July 25, 1885:

Captain F. W. Elbrey, Assistant Surgeon, sick leave of absence further extended four months on surgeon's certificate of disability. (S. O. 162, A. G. O., July 17, 1885.) *Captain Norton Strong*, Assistant Surgeon, ordered for temporary field duty with battalion Eighth Cavalry at Hillsboro, New Mexico. (S. O. 34, Hdqrs. District of New Mexico, June 27, 1885.) *First Lieutenant Edward Everts*, Assistant Surgeon, ordered for duty as Post Surgeon, Benicia Barracks, Cal. *Captain C. K. Winne*, Assistant Surgeon, ordered for duty at Benicia Arsenal, Cal. (Par. 3, S. O. 70, Department California, July 15, 1885. Modifies par. 2, S. O. 68, C. S. Department California.)

OFFICIAL LIST of Changes of Stations and Duties of Medical Officers of the United States Marine Hospital Service for the two weeks ended July 25, 1885

Fessenden, C. S. D., Surgeon, leave of absence extended eight days on account of sickness. July 20, 1885. *Irwin, Fairfax*, Passed Assistant Surgeon, granted leave of absence for ten days. July 14, 1885. To inspect unserviceable property at St. Louis, Mo. July 15, 1885.